

Climate Change

What to think and what to do

5. Misinformation

We don't inherit the Earth from our ancestors, we borrow it from our children.

Misinformation

Mis or Dis?

- Misinformation is “*false information that is spread, regardless of intent to mislead.*”
 - Intent is not important, the label is for *any kind* of wrong or false information
 - We all do it sometimes, spreading what we believe to be true, even where it’s not the whole story, or just plain wrong.
 - It’s damaging, but not a sin, just human.
- Disinformation is “*deliberately misleading/biased information; manipulated narrative/facts; propaganda.*”
 - A lot of disinformation is *skilfully crafted* (to include emotive triggers, conflate two things, hide the full picture, etc)
 - And *skilfully disseminated* (as to timing, audience selection, medium used, etc.)
 - Save where used to protect a child against the full horror about Santa Claus, disinformation *is* a sin (reprehensible)
 - And therefore is usually crafted or disseminated so that:
 - the true source is hard to find, and/or
 - if found can claim it wasn’t meant like that (“*taken out of context*” etc)
 - That’s why there are “useful idiots” – people who, once they’ve swallowed the nonsense, become its greatest advocates, often researching further, gathering defences to counter-claims etc.
- I use the term misinformation here, because I want you to be the one to decide whether it is also disinformation. (Sometimes it will be obvious what my view is, but we should all be charitable where we can be.)

The big picture

- Vested interests have *known for a long time* that Fossils Fuels → *dangerous* levels of Climate Damage
 - [Exxon scientists in the 1970s accurately predicted climate change | New Scientist](#)
 - [Exxon Mobil accurately predicted global warming in the 1970s, new study shows | Daily Mail Online](#)
(if you want to amaze yourself, go to this DM article, note there are 88 comments where fifteen stories on the same day about Harry & Megan all got thousands, and then read them! Almost every trope denying Climate Change thrives there)
- They have huge resources, which they use to manipulate people
- They know as well as anyone HOW to do this manipulation:
 - The old phrase “Fear, uncertainty, doubt” (FUD) – based on misinformation
 - They can pay well for expertise
 - And there’s a roadmap: The “Tobacco Playbook” (more anon)
- Politicians connive, because:
 - Due to ‘Money in Politics’, they must!
 - They are, to a significant extent, the same people
 - Politics is the art of the possible. Until voters care, acting is suicidal
- Here’s a picture of what we’re up against →

Understanding Opposition to Climate Change Action in the United States



Misinformation

The Tobacco Play Book – illustrations

According to repeated nationwide surveys,

More Doctors Smoke **CAMELS** than any other cigarette!

You'll enjoy Camels for the same reason
as more doctors enjoy them. Camels have
real, real richness, pack after pack, and
a flavor unmatched by any other cigarette.
Make this switch to real. Smoke only
Camels for 30 days and you'll know. Camels
please your taste. Just wait! They'll
soon please your throat, too. You'll
see how enjoyable a cigarette can be!

Doctors in every
branch of medicine
were asked, "What
cigarette do you smoke?"
The brand named most
was Camel!

THE DOCTORS' CHOICE IS AMERICA'S CHOICE!



For 30 days, test Camels in your "T-Zone" (T for Throat, T for Taste).

Viceroy's FILTER the Smoke!



As your Dentist,
I would recommend

Yes, that's Ronald Reagan there! →

I'M SENDING CHESTERFIELDS to all my friends.
That's the merriest Christmas any smoker can have —
Chesterfield mildness plus no unpleasant after taste.

Ronald Reagan

see RONALD REAGAN
starring in "HONG KONG" in Fine
Thomas Paramount Production
Color by Technicolor



CHESTERFIELD

Buy the beautiful
Christmas-card carton

Misinformation

How?

First technique:

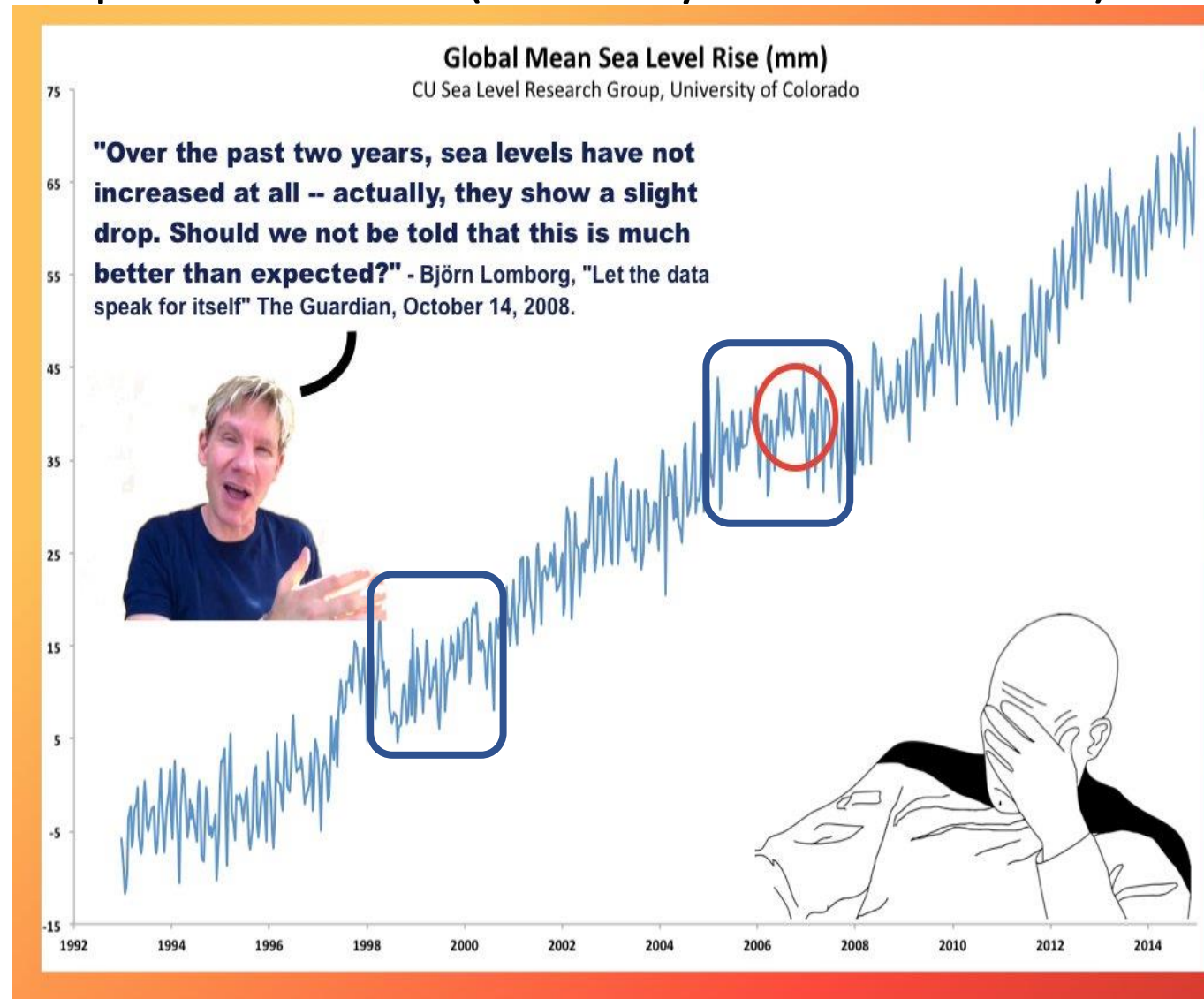
DISMISS the problem

- Deny it
 - It's not warmer / this is natural and normal (e.g. “medieval warm period”, the 50s and 60s, the pause in the “hockey stick” in the early 2000s)
 - The models are hopelessly wrong (unrealistic / unreliable / retro-fitted)
 - (Patient rebuttal by Katherine Heyhoe: [Climate Models | Global Weirding - YouTube](#))
 - The models are intentionally wrong (*Orchestrated* conspiracy - Soros/Maurice Strong)
 - George Soros crops up in pretty much every conspiracy! “He’s a billionaire” - funding this!
 - Ignoring about 3,000 other billionaires, mostly aligned on the other side
 - “They’re only in it for the money” (!)
 - (*Exasperated* rebuttal by Katherine Heyhoe: [Climate change, that's just a money grab by scientists... right? - YouTube](#))
- Deathropomorphise it, i.e. Accept it but deny the cause
 - Ok it is warmer, BUT it's not humans doing this (e.g. Solar activity)

Misinformation

How? – Dismissal (not happening) – Example: “the Pause” (used for years around 2010)

- ‘Pauses’ do happen
- But then they end...
 - Lomborg: ‘*look at the drop*’ (2008)
 - Mostly, this kind of nonsense is no longer respectable
 - So... Lomborg has now reinvented himself as a *down-player* (more anon)
- A reusable falsehood: “*Global warming appears to have halted in 1998*”—an earlier claim that subsequent research has disproved and which NOAA has deconstructed in a Q&A
- See *Debunking “This is Natural”*: https://youtu.be/k5_zpjerQFo



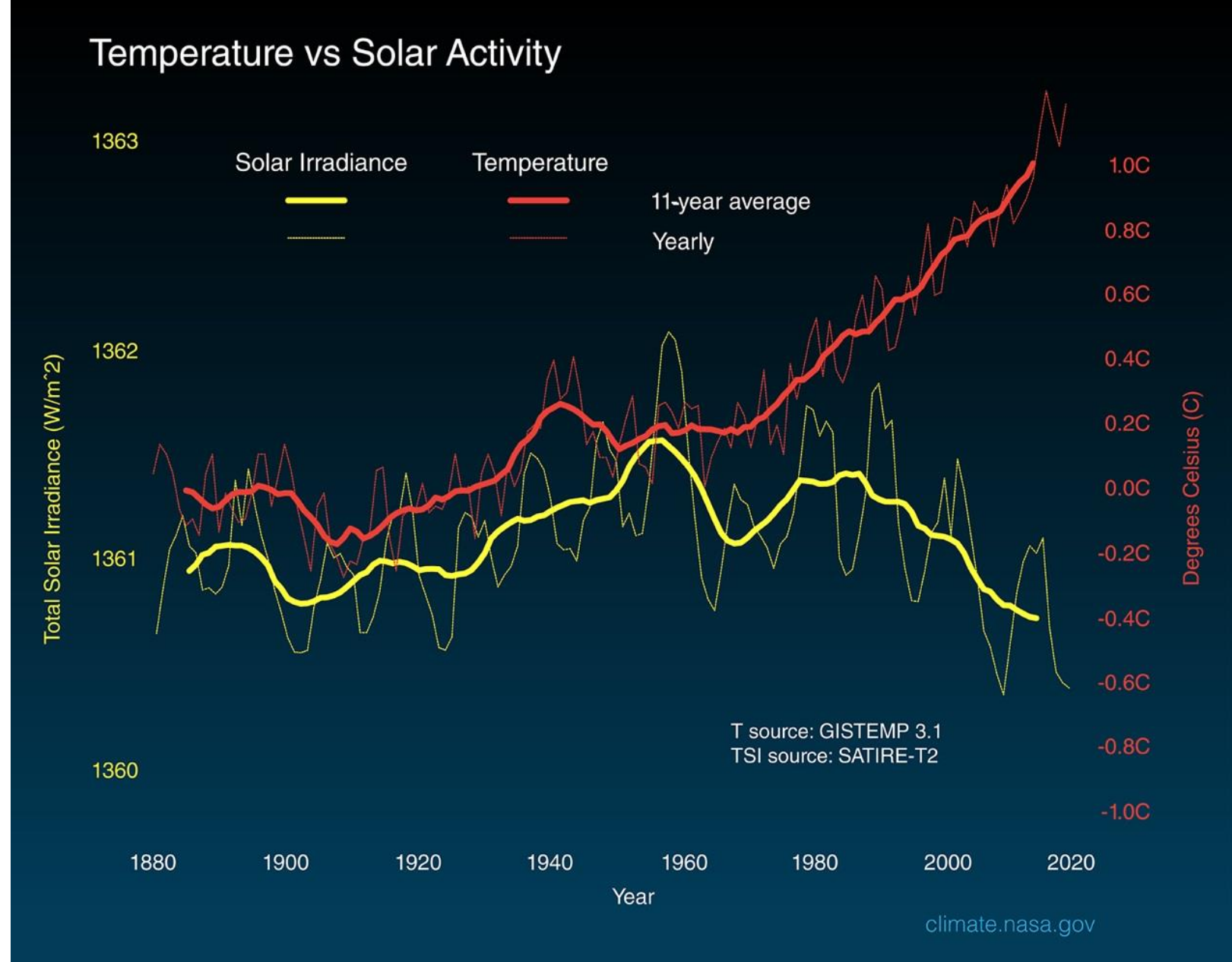
Misinformation

How? – Dismissal – “not *us*”

- No, it's *not* solar activity
- (Or volcanoes, etc etc)

[Climate.nasa.gov](https://climate.nasa.gov)

- *In general*, the data shows that, based on other natural factors, the Earth should be *cooling* right now



How? – Dismissal ---> Discombobulation

- Dismissers are now a minority (7%), and *dwindling*, even in the republican areas of the US
 - There is a tsunami of data and evidence for AGW*, such that to doubt it you must *also* believe in a *very* large, *very* sophisticated conspiracy
 - Occam's razor *ought to be* a useful tool: what's the least contrived explanation?
 - Although still some total loons like Peter Thiel (“democracy and freedom are incompatible”) who use Dismissers as ‘useful idiots’
- Most ‘*professional*’ obstructors have now switched tactics, from Dismissal to Discombobulation.
- There's little point trying to convince a Dismissal – they'll be impervious (*cf Festinger*: [When Prophecy Fails - Wikipedia](#))
 - But it *is* worth convincing those less invested (the Discombobulated, i.e. confused), whose minds are open (*cf Munger's “Egg”*)

* AGW = Anthropogenic Global Warming

How? – Post-dismissal (the “Discombobulation” strategies)

- Deflectors - Not our/my problem (i.e. yes, it’s humans, but just not my tribe.)
 - *Population* is the problem – stop ‘them’ breeding!
 - *Other countries* are the problem – (especially China)
 - “Never mind *us*, *you’re* the problem” – Personal Carbon Footprints (concept seeded by Big Oil!)
- Downplayers (not of the problem itself, or its size, but of the *need for radical change*)
 - We can adapt to the impact (instead of stopping it happening)
 - Tech will save the day
 - Let’s keep talking, surely we can find some cost-free solutions.
- Distractors
 - Change will be too painful
 - We can’t afford it - People will be hurt by action
- Despairers (aka Doomers) - We *can’t* fix it / we’re doomed (So just carry on as you are)

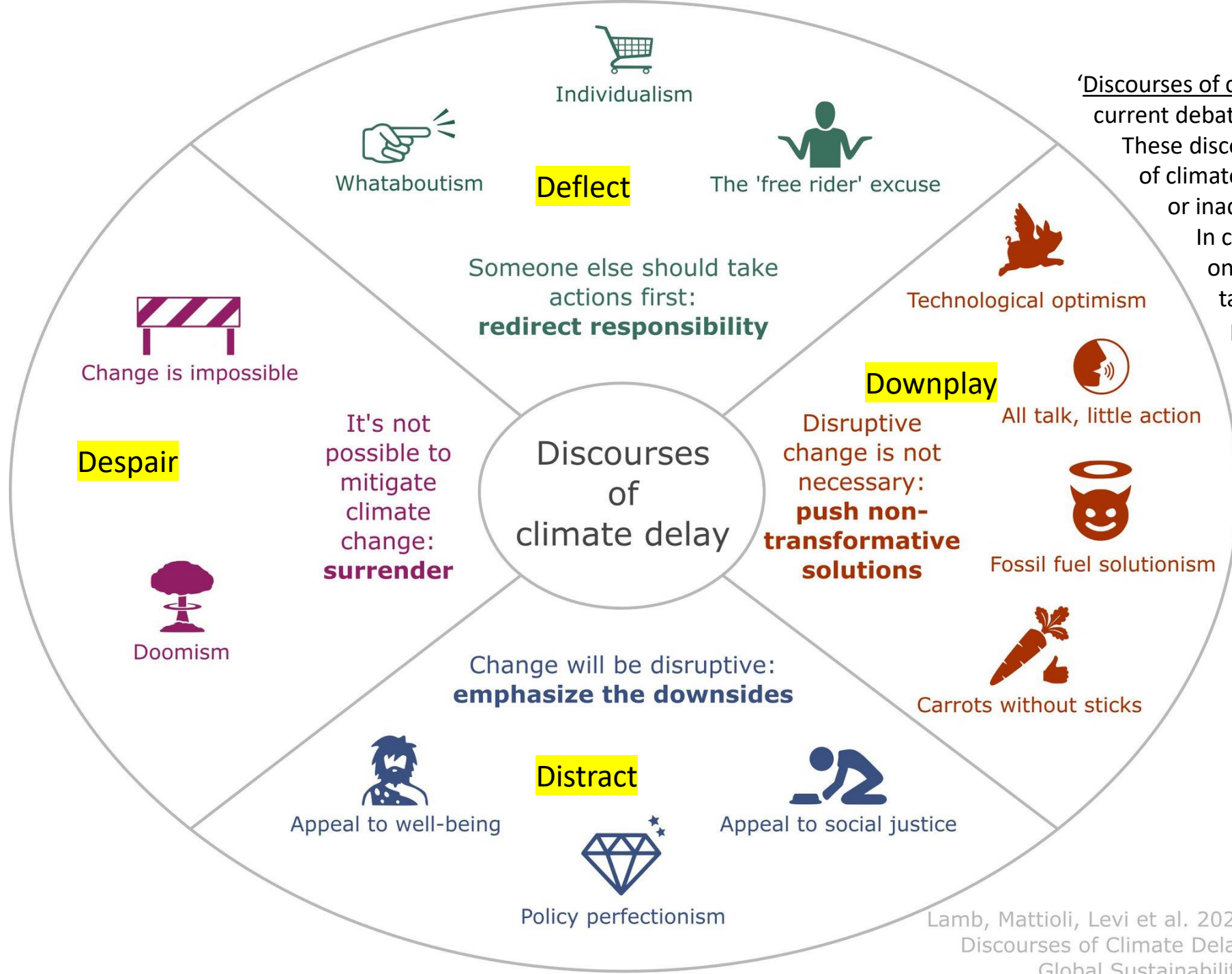
And the playbook says - fund all of these..

heavily, quietly, indirectly, respectably, using subtle/catchy language, and cover your tracks!

How? – Post-dismissal (the “Discombobulation” strategies)

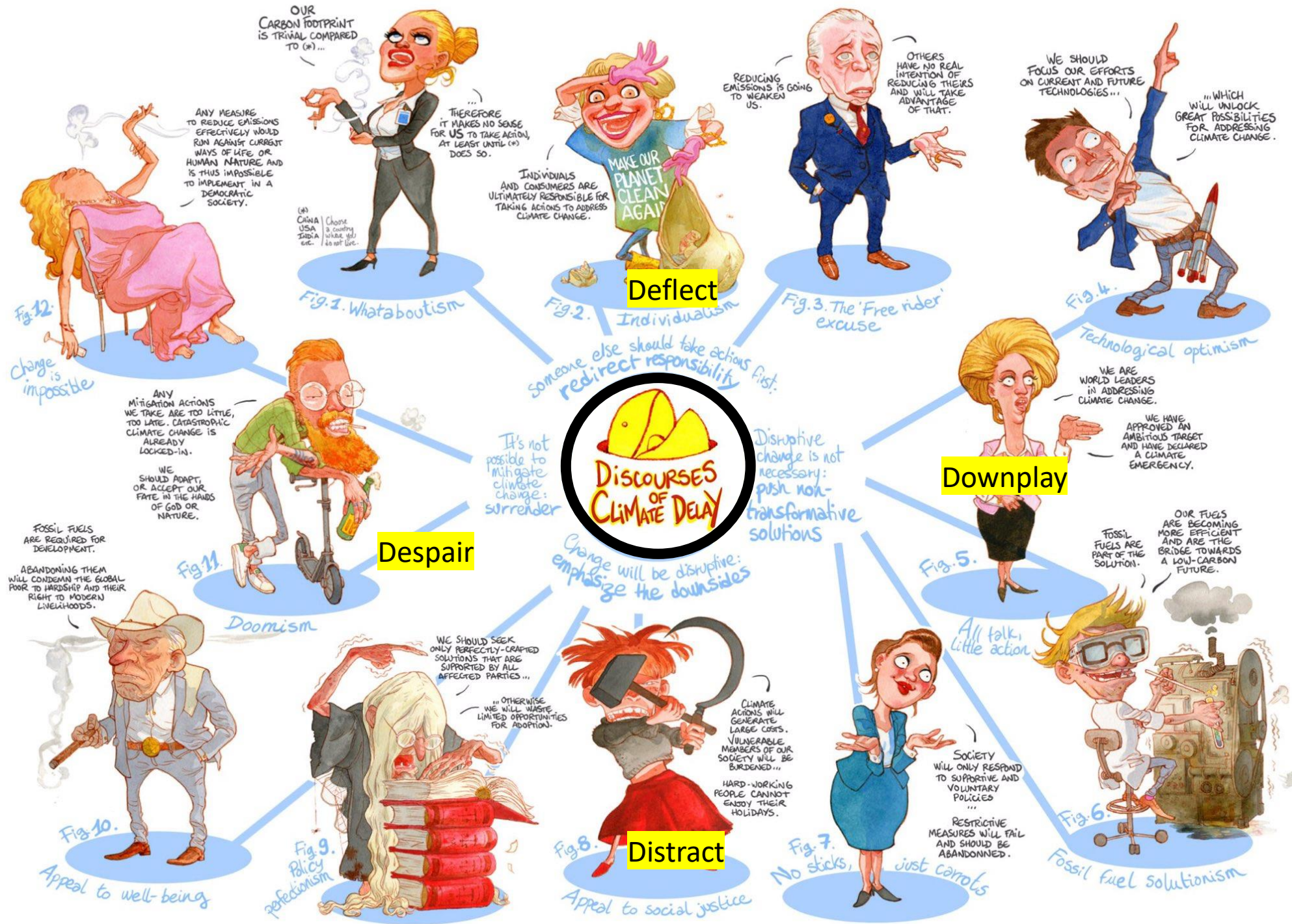
And (due to our defective human software) we are very receptive to these viruses!

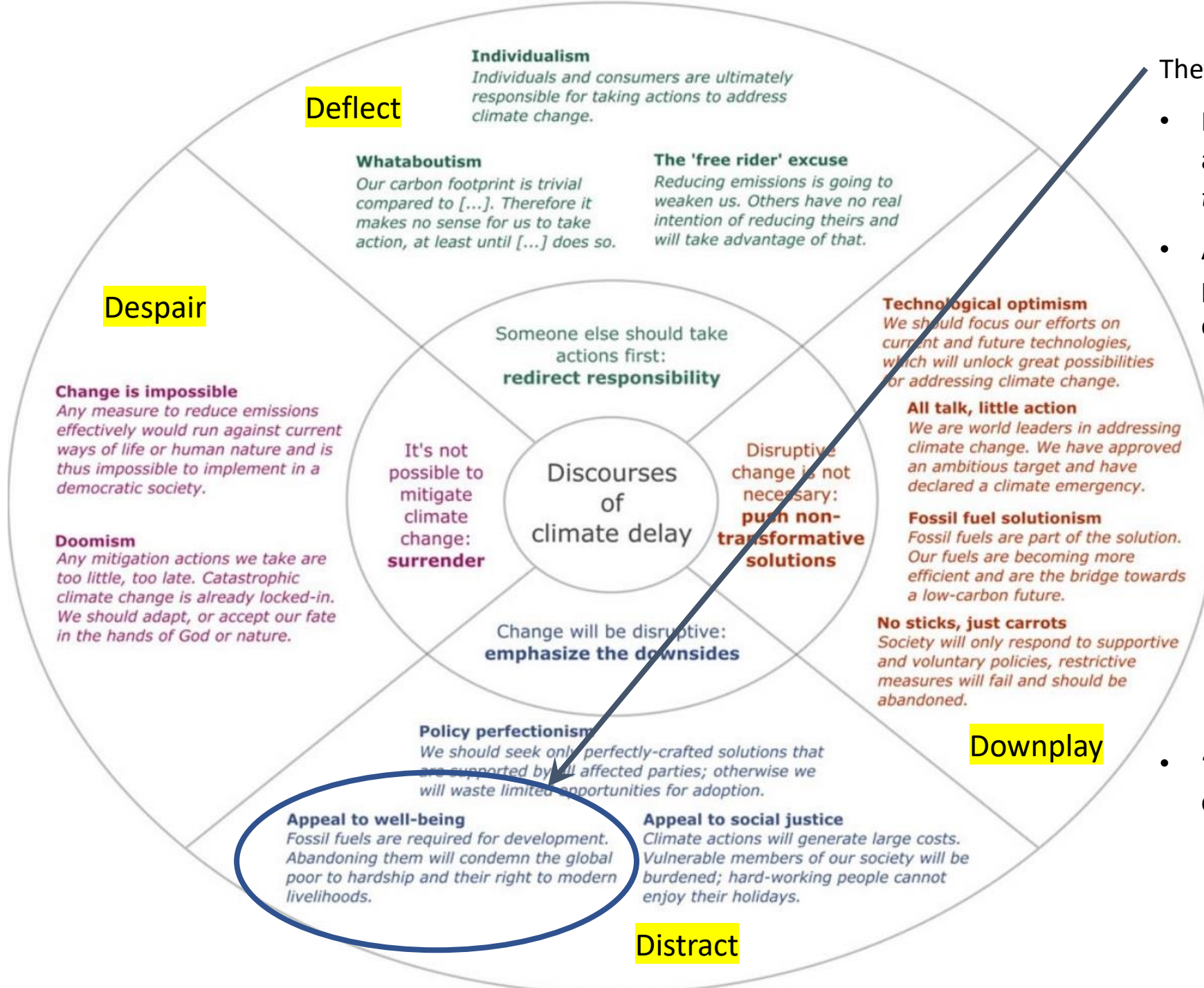
- When the “strategy” of *denying* a problem is no longer tenable, we are programmed to:
 - Deny we are responsible (Deflection)
 - Make light of it (Downplayers)
 - Put off any action, often finding “counter-balancing” reasons to not act. Change the subject (Distractors)
 - Say it’s all too much / Que sera, sera (Despairers)
- These are all *attractive, restful* states of mind to be in
 - *relative* to the discomfort of knowing “yes, we must all act - drastic change needed”
 - *even* Doom, because it absolves you from the need to think or act
- *Because* it “sets minds at rest”, it’s quite easy for ‘certain agents’ to provide us with props, to help that ‘step-down’ from denial into some form of doldrums
- Let’s look at 12 doldrum mindsets (“Discourses of Climate Delay”). Can you spot them in:
 - Professionals/Pundits?
 - Friends and family?
 - Yourself??



'Discourses of climate delay' pervade current debates on climate action. These discourses accept the existence of climate change, but justify inaction or inadequate efforts.

In contemporary discussions on what actions should be taken, by whom and how fast, proponents of climate delay would argue for minimal action or action taken by others. They focus attention on the negative social effects of climate policies and raise doubt that mitigation is possible. Here, we outline the common features of climate delay discourses and provide a guide to identifying them.





They're all wrong, but just on this one:

- It is *the global poor* who are already paying for the profligacy of *the rich*!
- And even for us rich, there are, potentially, great **benefits** from the changes we need to see:
 - Taming the madness of consumerism. Do we need a whole wall of CDs?
 - More sharing → stronger community
 - And of course, a habitable planet, without billions of people trying to escape misery
- “Would you rather have air you can breath, or a nice fridge?”

Who

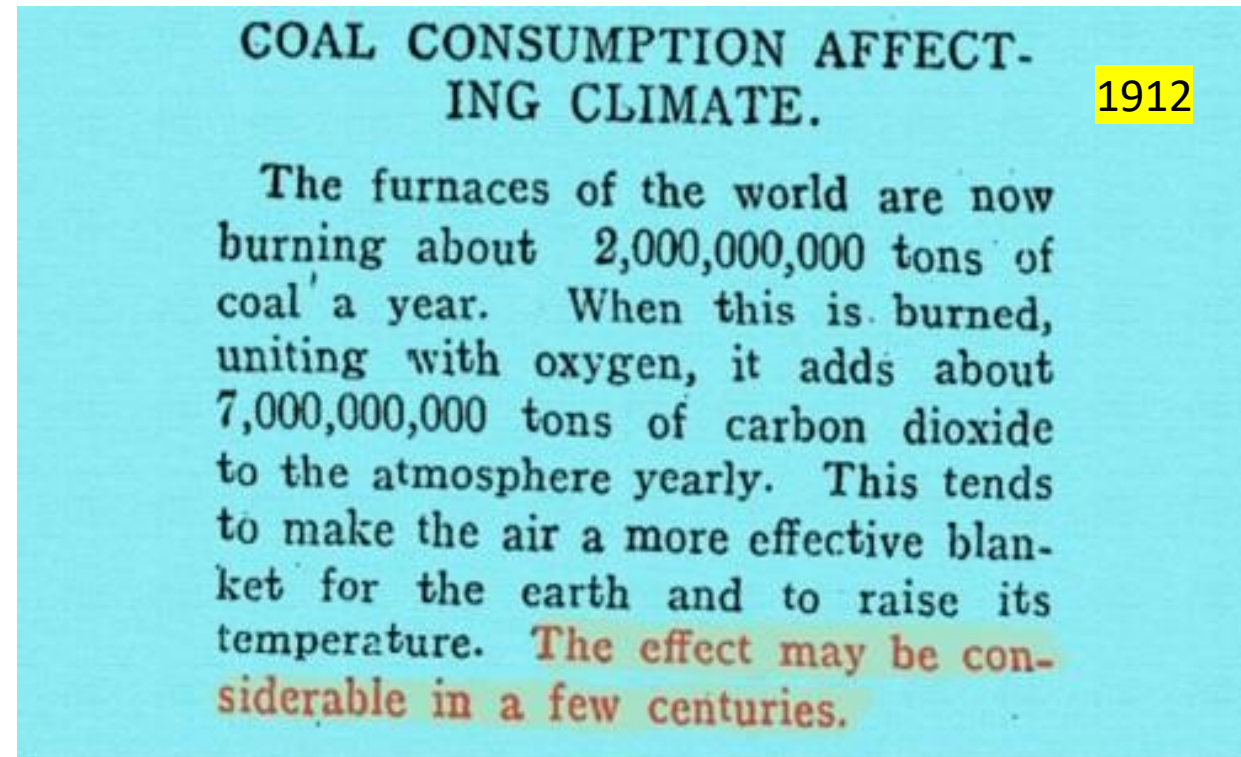
Who supplies the information and ‘talking points’ to support the 4 big Ds?

- Vested Interests
 - Tobacco (the paradigm/architect)
 - Sugar
 - Pharmaceuticals, but in the present case....
 - Big Oil! (and Coal... and FF-reliant industrialists.... and the elite 0.1%, especially the 0.01%)
- The “consultants” aka lickspittles (rewarded by, and using *money* from, Vested Interests and their owners)
 - Lobbyists, PR shills
 - Think-Tanks (the way the powerful countered universal suffrage)
 - Revolving doors (Journalists, Politicians, Board Rooms)
 - Investment/merchant bankers, lawyers, tax advisors, accountants, etc)

Who

Big Oil knows the facts are against them

- 1824 “*Earth’s atmosphere allows the planet to be warmer than it would be without one*” Joseph Fourier (basic understanding of the greenhouse effect)
- 1882 “*increased pollution will have a marked influence on the climate of the world*” article in Nature
- 1912 article in Popular Mechanics:
(turns out *one* century was enough ☹)
- Exxon knew FF → dangerous global warming since at least the 1970s, probably since the 1950s
- So...
- People have to be led astray...



Who

- [BBC iPlayer - Big Oil v the World](#) (3 60min documentaries) 40 years of deliberate deception
 - Denial. Early 1980s - late 1990s
 - Exxon modelled the impact of CO₂ in the atmosphere, drew stark conclusions, then buried them.
 - Doubt. 2000-2010
 - Big Oil used paid lobbyists to influence both public and political opinion against science.
 - Delay. 2011-2020
 - Defending fracking for shale gas, despite knowing this caused huge increases in methane released into the atmosphere
 - Still happening....
- [2022.09.14 Hearing Report PR Firms Preventing Action on Climate Change.pdf \(house.gov\)](#)
 - *“The oil and gas industry’s role in spreading climate misinformation to prevent action on climate change has been extensively studied, but less is known about the critical role of public relations (PR) firms in that process. The House Natural Resources Committee (Committee) has been investigating the sophisticated and varied ways in which some PR firms use their considerable public-influence expertise to help industry mislead the public and block climate change policy proposals. This report summarizes the investigative findings to date.”*

Who

One might ask, *how can they live with themselves?*

- Human psychology
- The silo effect (*“everyone I know works in Oil, they’re good guys, smart guys, fun guys, kind to animals...”*)
- Lots to lose

But as mentioned, we can’t change them, only protect others (and ourselves) from swallowing their charms

So we need to look not just at the *‘why/who/what’*, but also at the *‘how’*

- So that we can sway those at the margin, who are swallowing the lies

Misinformation

How – follow the money

“It’s hard to get a man to understand something when his salary depends upon him not understanding it”

Upton Sinclair

Which is why corporates and wealthy individuals spend so much on people’s salaries (and other funding)!

- Employees, fair enough
- Advisors, hmm ok maybe
- Politicians, definitely not!
 - Yet a huge proportion of the cash funding US (and UK) politicians comes from Big Oil

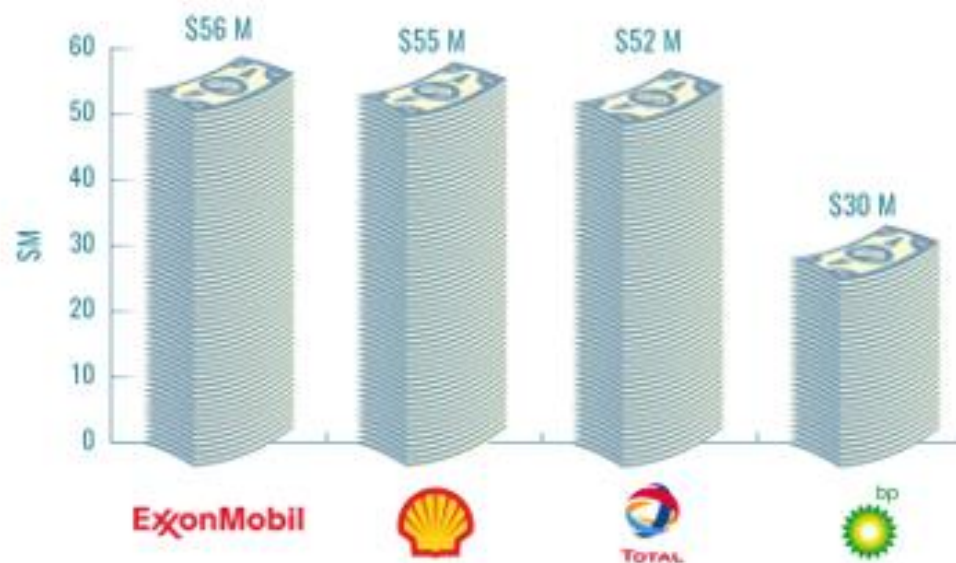
Misinformation

How – follow the money

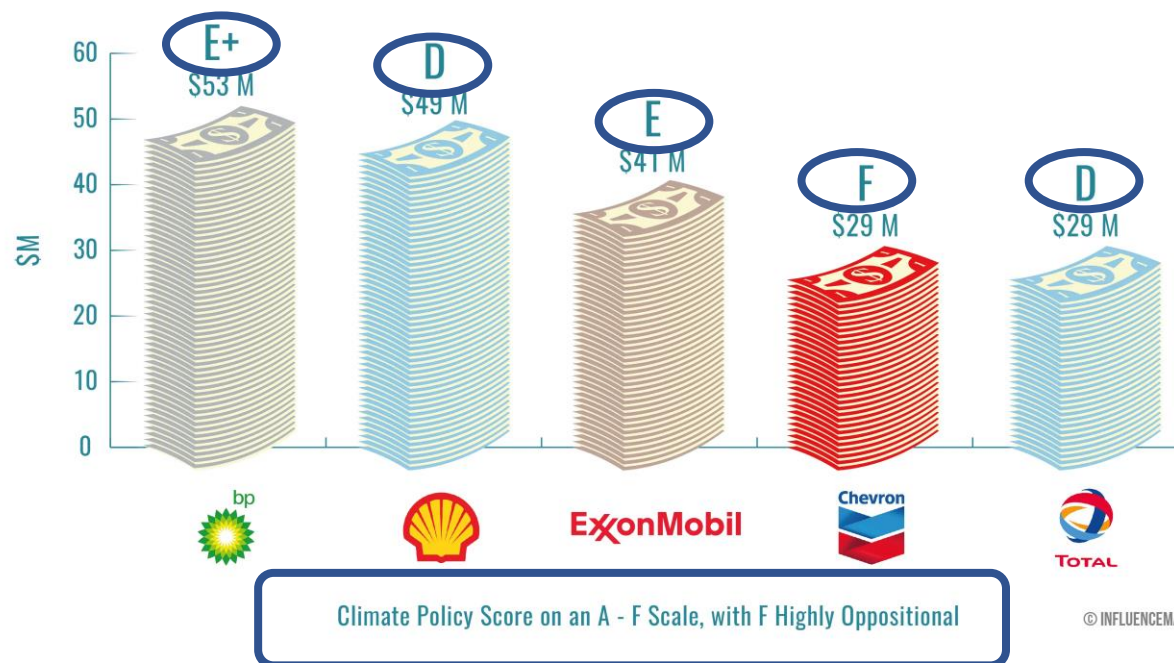
Money buys Influence!

Big Oil Invested More Than \$1 Billion On Misleading Climate Lobbying Since Paris – CleanTechnica

Spend on Climate Branding, 2018



Spend on Climate Lobbying, 2018



Out of all proportion to the share of non-FF revenue, or investment

How – subtle deception

- [Oil companies discourage climate action, study says – Harvard Gazette](#)
 - *“In 2017, I and Naomi Oreskes published a series of three papers focused on what you might call traditional climate-science denial by ExxonMobil. Then, in May of this year, we shifted gears slightly, releasing a new study looking at the company’s more subtle forms of climate propaganda.*
 - *“ExxonMobil misled the public about basic climate science and its implications. They did so by contributing quietly to climate science, and loudly to promoting doubt about that science.*
 - *“.. over and over, ExxonMobil has misled the public about climate change by telling the public one thing and then saying and doing the opposite behind closed doors. .. while their tactics have evolved from outright, blatant climate denial to more subtle forms of lobbying and propaganda, their end goal remains the same. And that’s to stop action on climate change.”*

Prof Supran, History of Science, Harvard

- *E.g. “personal carbon footprint” concept — now ubiquitous — first popularized by BP as part of a \$100 million/year marketing campaign 2004-6.*

Misinformation

How – subtle deception

- [Oil companies discourage climate action, study says – Harvard Gazette](#)
 - *“Mobil’s vice president and pioneer of PR in the ’70s and ’80s literally talked about what he called ‘semantic infiltration.’ He called it ‘the process whereby language does the dirty work of politics.’ And he said that the first ‘general principle’ of PR was to, quote, ‘grab the good words ... while sticking your opponents with the bad ones.’ Our research now shows that’s exactly what they’ve been up to for decades.”*
 - *“[Exxon] thread a very fine rhetorical needle, using language about climate change just strong enough to be able to deny that they haven’t warned the public, but weak enough to exculpate them from charges of having marketed a deadly product. So .. their propaganda has .. shifted into high gear and is now operating with a sophistication that we’ve never seen before. [They use]:*
 - *the rhetoric of risk (vs certainty)*
 - *individualized responsibility (vs corporates)*
 - *“discourses of delay,” e.g. greenwashing, fossil-fuel solutionism, technological optimism, and so on.*
 - *“These [techniques] are now pervasive in industry marketing and, in turn, in the ways that the public and policymakers think and talk about the climate crisis.”* Prof Supran, History of Science, Harvard
- Recall: “Do it heavily, quietly, indirectly, respectably, use subtle/catchy language and cover your tracks..”

Misinformation

How – the Tobacco PlayBook

- *"That was a Eureka moment. We realised this was not a scientific debate. A person with expertise about climate change would in no way be an expert about oncology or public health or cardiovascular disease, or any of the key issues associated with tobacco.*
- *"The fact that the same people were arguing in both cases was a clue that something fishy was going on. That's what led us to discover this pattern of disinformation that gets systemically used again and again."*
- Naomi Oreskes spent years going through 14 million documents that were made available thanks to litigation against US tobacco firms.
- A strikingly familiar story emerged. Decades before the energy industry tried to undermine the case for climate change, tobacco companies had used the same techniques to challenge the emerging links between smoking and lung cancer in the 1950s.
- It's known as the "Tobacco Playbook" - *"The purpose of these programmes was not to advance scientific understanding, it was to create enough confusion that the public would doubt the existing scientific evidence."*

[Tobacco industry playbook – Wikipedia](#)

[How the oil industry made us doubt climate change - BBC News](#)

(<https://www.bbc.co.uk/news/stories-53640382>)

[Climate Deniers Are Using These Four Major Scare Tactics to Stop Climate Action – DeSmog](#)

(<https://www.desmog.com/2021/11/16/four-major-climate-denial-scare-tactics-twitter/>)

<https://centralbylines.co.uk/big-oil-v-the-world/>

Misinformation How - Greenwashing

When Oil companies say they're going green

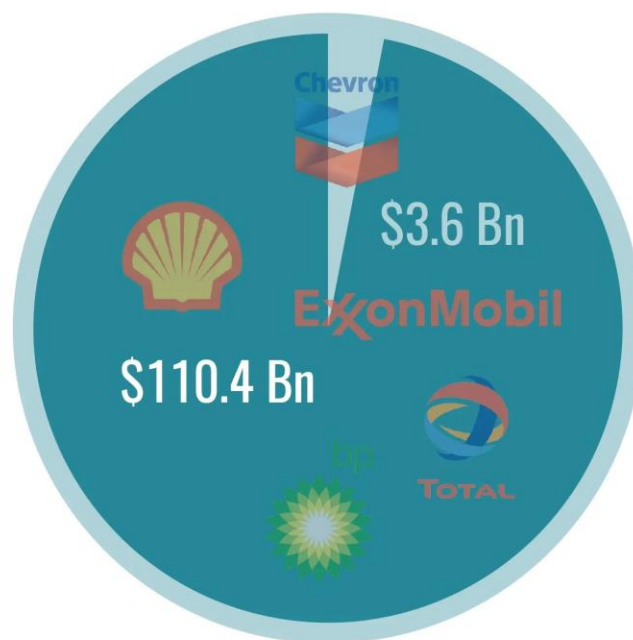


Misinformation

How - Greenwashing

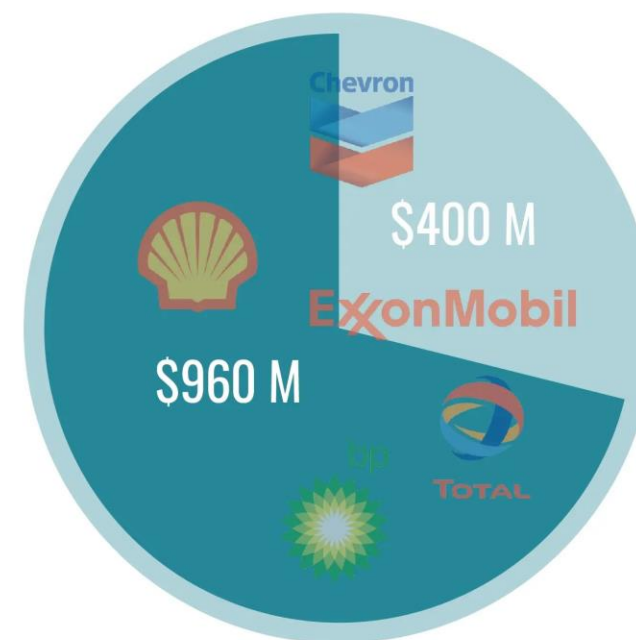
Oil Majors' Annual Spend

FORECASTED CAPITAL EXPENDITURE, 2019



3%

LOBBYING/BRANDING SPEND, 2018



29%

Oil majors spend heavily on lobbying about climate

97% of their investment is in Fossil Fuels, only 3% on renewables... but 29% of branding is on climate/low carbon

Oil & Gas
Low Carbon

Non Climate
Climate

Misinformation Some good news.....

Misinformation can only go so far

Ultimately, the planet speaks

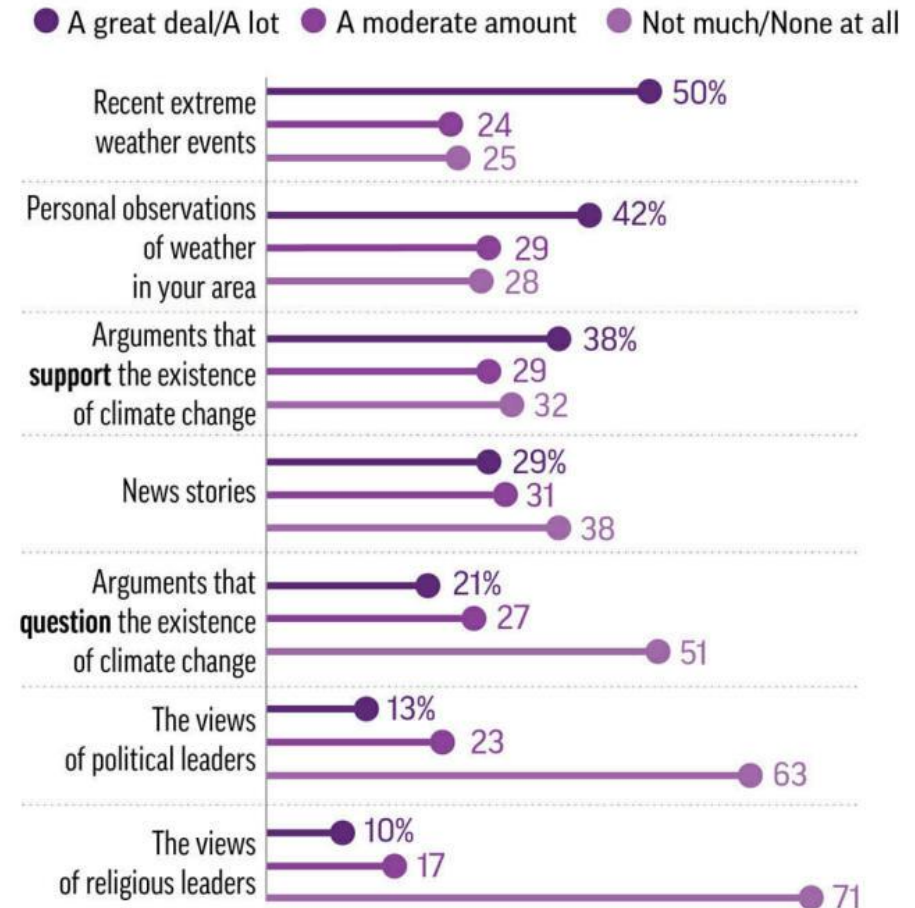
And... things like *extreme weather do* influence people

So..

Personal experience trumps arguments, news and views

Poll: Weather extremes color climate views

Q: In the past five years, how much influence, if any, have the following had on your views about the science on climate change?



Results are based on interviews with 1,202 U.S. adults conducted Nov. 14-19, 2018. Margin of error is ± 3.9 percentage points for the full sample.

SOURCE: AP-NORC Center for Public Affairs Research

Taking Stock – the story so far...

So there are *three* connected problems:

- Planetary destruction via AGW and related crises (Climate system failure)
- Our collective inertia, due to both
 - Spineless, wrongly incentivised politicians (socio-political system failure)
 - Complacency about where FMC is taking us (economic system failure)
- The active sabotage of the changes we need to implement, by vested interests

Now we have a clear diagnosis, we can begin to look at cures 😊 (next time)

In brief:

- Change, yourself
- BUT (even in aggregate) this isn't going to be enough, or fast enough
- Our duty to our offspring extends beyond personal lifestyle adjustment
 - Analogy: you're part of a gang bullying the spotty kid, and deciding you'll *stop joining in* the beatings
 - You need to pressure the teachers (who are paid by the bullies to turn a blind eye) to *stop the beatings*
- Join forces with others to
 - expose misinformation
 - wake people up, &
 - force politicians to act – they'll benefit from a good smack!
- Avoid despair
 - it's only *slightly* 'too late' - every 0.1 deg C saved is hugely beneficial – and there are better and worse options